

REMARKS

The Office Action of July 26, 2004 has been received and its contents carefully noted.

The present Amendment revises independent claim 1 to further distinguish the invention from the Wang et al reference, as will be discussed in more detail below.

The present Amendment also revises dependent claims 3, 5, and 15 in response to the objection at the top of page 2 of the Office Action. In view of the revisions, it is respectfully submitted that the objection should be withdrawn.

In addition, the present Amendment makes revisions in independent claims 11 and 19 to improve their idiomatic English.

The Office Action rejects independent claims 1, 11, and 19 (along with a number of dependent claims) for anticipation by U.S. patent 6,258,634 to Wang et al. This reference will hereafter be called simply "Wang." For the reasons discussed below, it is respectfully submitted that the inventions defined by these independent claim are patentable over the reference.

Independent claim 1 recites a first region, a second region formed in the first region, and a third region formed in the second region. It also recites "a first ground connection region ... and a second ground connection region ... both formed in said first region, at locations that do not overlap the second region or the third region." The paragraph bridging pages 2 and 3 of the Office Action draws attention to the regions 120 and 124 in Wang's Figure 3. However, Wang's regions 120 and 124 are not "in" Wang's first region (identified in the Office Action as Wang's P-substrate), and moreover they overlap Wang's first region. Accordingly, the invention defined by claim 1 is not

anticipated by Wang. Nor would the reference have provided an incentive for an ordinarily skilled person to modify what Wang discloses so as to achieve the invention defined by claim 1.

Independent claim 11 recites that an SCR structure includes first, second, and third regions. Claim 11 then recites a first electrode region, and “a second electrode region connected to said second semiconductor region,” with this second electrode region having first and second parts with different conductivity types. The paragraph bridging pages 2 and 3 of the Office Action identifies Wang’s N-well region 116 (see Figure 3 of the reference) as Wang’s second region. However, Wang’s second electrode region is connected to his P-base region, and not to Wang’s N-well region 116. Accordingly, Wang does not anticipate claim 11. Nor is there any apparent reason why an ordinarily skilled person would have been motivated to modify Wang’s structure so as to achieve what is recited in claim 11.

Independent claim 19 recites the step of “forming a second electrode region having a first part ... and a second part ... both connected to said second semiconductor region.” For reasons along the lines discussed above with respect to claim 11, it is respectfully submitted that this step is neither disclosed nor suggested by the Wang reference.

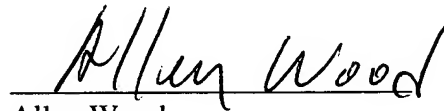
Turning next to independent claim 24, this claim recites the step of forming an SCR structure, and steps for connecting both a first electrode region (having regions of different conductivity types) and a second electrode region (also having regions of opposite conductivity types) to this SCR structure. This, it is respectfully submitted, is neither disclosed nor suggested by the arrangement shown in Wang’s Figure 5.

The Office Action also rejects independent claim 24 for anticipation by U.S. patent 5,012,317 to Rountre. However, claim 24 recites forming an SCR structure and then connecting first and second electrode regions to it (with both of the first and second electrode regions having regions of opposite conductivity types). In contrast, Rountre's Figure 3, and the passage beginning at line 53 in column 4 of the reference, indicate that the regions 48 and 52 in Rountre's Figure 3 are part of his SCR structure. Accordingly, the reference neither discloses nor suggests forming an SCR structure and then connecting first and second electrode regions to this SCR structure, with both of the first and second electrode regions having regions of opposite conductivity types.

Since the remaining claims depend from the independent claims discussed above and recite additional limitations to further define the invention, they are patentable along with their independent claims and need not be further discussed.

For the foregoing reasons, it is respectfully submitted that the present application is in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script that reads "Allen Wood". The signature is written in dark ink and is positioned above a horizontal line.

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